

New England States
Committee on Electricity

May 21, 2014

VIA ELECTRONIC MAIL

Dr. Ernest Moniz
Secretary
U.S. Department of Energy
c/o Office of Energy Policy and Systems Analysis, EPSA-60
QER Meeting Comments
1000 Independence Avenue SW
Washington, DC 20585-0121

**Re: Quadrennial Energy Review: Comment on the New England Regional
Infrastructure Constraints Public Meeting – Parts 1 and 2**

Dear Secretary Moniz:

The New England States Committee on Electricity¹ (NESCOE) appreciates your close and continued attention to the acute natural gas delivery challenges in New England. The U.S. Department of Energy's (DOE) April 21, 2014 Quadrennial Energy Review (QER) meeting in New England spotlighted the severity of infrastructure constraints in our region, their implications for reliable service and economic competitiveness, and an emerging regional solution under development by the New England states at the direction of the six New England Governors. NESCOE also appreciates the data and analysis that DOE regularly provides through the Energy Information Administration (EIA), which shows in stark detail the energy price volatility that New England has experienced over the winter months.

State officials from each of the New England states participated in the QER meeting and described a conceptual approach to addressing regional infrastructure needs about which the

¹ NESCOE is the Regional State Committee for the New England region.

states have sought stakeholder feedback. NESCOE submits these comments to provide additional background and detail on the advancement of this proposal.

An Unsustainable Status Quo

Reliability Risks

Infrastructure constraints over several winters have exposed New England’s fuel security risks. Both the Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC)—entities with responsibility for bulk power system reliability—have identified pipeline constraints in New England as a threat to reliability.² ISO New England Inc. (ISO-NE) has also repeatedly drawn attention to the operational difficulties it faces in managing a power system that has shifted to gas-fired generation dependent on a “just in time” fuel supply that is constrained during a growing number of critical peak demand periods.³ The DOE Staff Briefing Memo, issued prior to the QER meeting, stated that last winter “[a] regional energy crisis was narrowly averted in part because [ISO-NE] . . . took unconventional,

² FERC, 2012 State of the Markets Report, at 2 (identifying New England “as a market particularly at risk for service disruption due to limited pipeline capacity into the region.”), *available at* <http://www.ferc.gov/market-oversight/reports-analyses/st-mkt-ovr/2012-som-final.pdf>; NERC, 2013-2014 Winter Reliability Assessment, Nov. 2013, at 2 (finding that gas pipeline infrastructure constraints could lead to supply interruptions to gas-fired resources and a consequent “reliance on back-up fuel (generally oil) to meet peak demand.”), *available at* http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/2013WRA_Final.pdf.

³ *See, e.g.*, Prepared Testimony for Gordon van Welie, U.S. DOE Quadrennial Review Meeting, Apr. 21, 2014 (“Gordon van Welie Testimony”), at 2, 5 (“We only have to look to the past two winters to understand the precarious position we are in for the next few years. . . . We’ve made it through these past two winters by relying heavily on non-gas fired resources, but . . . that landscape is changing rapidly.”), *available at* <http://www.energy.gov/epsa/downloads/qer-public-meeting-new-england-regional-infrastructure-constraints>; ISO-NE, Strategic Planning Initiative, Addressing Gas Dependence, July 2012, at 1 (“[G]iven current and anticipated levels of gas usage, potential gas unavailability threatens the reliability of the electric system due to the limited-capacity pipelines use to transport gas, potential gas supply interruptions, and the ‘just in time’ nature of the resource.”), *available at* http://www.iso-ne.com/committees/comm_wkgrps/strategic_planning_discussion/materials/natural-gas-white-paper-draft-july-2012.pdf.

aggressive and preemptive steps to ensure energy supplies in advance of peak demand during cold winter months[.]⁴

Over the next several years, at the same time that pipeline constraints are expected to persist, over 3,000 MWs of non-gas-fired resources are set to retire.⁵ These retirements may further stress the region's power system, as fuel diversity diminishes and new power plants using gas as a primary fuel come on-line.⁶

Price Impacts and Regional Competitiveness

New England's residents and businesses are paying exceedingly more for power than those in neighboring states and across the country. Despite its close proximity to the largest shale gas play in the nation, New Englanders paid higher natural gas prices than any other region in 2013.⁷ Last year, average spot prices in New England's major trading location, Algonquin Citygate, were twice as high (\$6.90/MMBtu) as Pennsylvania's major hub (\$3.17/MMBtu) and \$1.80/MMBtu more than in New York.⁸ From January 1, 2014 to February 18, 2014, prices at Algonquin Citygate averaged \$22.53/MMBtu, a record since EIA began tracking data in 2001, and spiked at one point to almost \$80/MMBtu.⁹

With electricity prices tracking natural gas prices, this translated to wholesale electricity market increases of over 50% from the prior year.¹⁰ A frequently cited ISO-NE data point lays bare the economic consequences of infrastructure needs: the energy market value this past winter

⁴ DOE, Staff Briefing Memo, U.S. DOE Quadrennial Review Meeting, Apr. 15, 2014, at 2, available at <http://www.energy.gov/epsa/downloads/qer-public-meeting-new-england-regional-infrastructure-constraints>.

⁵ See ISO-NE, 2014 Regional Electricity Outlook ("2014 REO"), at 15, available at http://www.iso-ne.com/committees/comm_wkgrps/strategic_planning_discussion/materials/2014_reo.pdf
⁶ *Id.*

⁷ EIA, *New England and New York have largest natural gas price increases in 2013*, Today in Energy, Jan. 7, 2014 ("EIA Report"), available at <http://www.eia.gov/todayinenergy/detail.cfm?id=14491>; 2014 REO at 39.

⁸ EIA Report.

⁹ EIA, *New England spot natural gas prices hit record levels this winter*, Feb. 21, 2014, available at <http://www.eia.gov/todayinenergy/detail.cfm?id=15111>.

¹⁰ 2014 REO at 39.

was \$5.05 billion, compared to \$5.2 billion *over the entire 2012 period*.¹¹ ISO-NE's 2013/2014 Winter Reliability Program, which helped guard against the potential of natural gas shortages, alone cost the region approximately \$66 million this past winter and ISO-NE has proposed a modified program for next winter.¹² Uplift payments also increased significantly in January due to fuel pricing and operational issues.¹³

New England retail electric customers are experiencing these dramatic wholesale energy costs, and will continue to shoulder these costs, until the region's infrastructure constraints are resolved. For example, executives from Northeast Utilities and National Grid testified at the QER meeting that their retail electric customers saw increases to the commodity portion of their bills of 30% and 35%, respectively.¹⁴ National Grid further expects that next winter will bring an *additional* 40% increase.¹⁵

These high prices place New England in a precarious economic position. Residents and businesses are burdened with energy costs spiking year over year. Vital infrastructure must keep pace with a growing and innovative New England economy.

¹¹ ISO-NE, Cold Weather Operations, FERC Technical Conference on Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators (AD14-8-000), Apr. 1, 2014, at Slide 22, *available at* http://www.iso-ne.com/pubs/pubcomm/pres_spchs/2014/winter_operations_technical_conference_april_2014.pdf; Gordon van Welie Testimony at 3.

¹² ISO-NE, NEPOOL Participants Committee Report, Winter 2013/14 Review and Winter 2014/15 Proposal Overview, May 2, 2014, at Slides 6, 56, *available at* http://www.nepool.com/uploads/NPC_20140502_Composite4.pdf.

¹³ *Id.* at Slide 32.

¹⁴ Prepared Statement for Thomas May, U.S. DOE Quadrennial Review Meeting, Apr. 21, 2014, at 2, *available at* <http://www.energy.gov/epsa/downloads/qer-public-meeting-new-england-regional-infrastructure-constraints>; Prepared Statement for Tom King, U.S. DOE Quadrennial Review Meeting, Apr. 21, 2014 ("King Statement"), at 3, *available at* <http://www.energy.gov/epsa/downloads/qer-public-meeting-new-england-regional-infrastructure-constraints>.

¹⁵ King Statement at 3.

Root Causes

The numerous factors contributing to New England’s reliability and economic challenges were described in the DOE Staff Briefing Memo issued prior to the QER meeting and in testimony provided by several meeting participants, most prominently:

- The transition to an increasingly gas-fired generation fleet relying on “just in time” fuel supply;
- The inability to date of the electricity markets to provide merchant generators with a basis to make firm fuel arrangements; and
- The announced retirements of approximately 3,300 MW of nuclear, coal-fired, and oil-fired resources between the current year and 2017.¹⁶

New England States’ Proposal

Collaborative Efforts

New England has a history of successful collaboration on a broad range of energy issues. For example, all six states are participants in the Regional Greenhouse Gas Initiative, a market-based greenhouse gas emissions reduction program. More recently, at the request of the six New England states, ISO-NE, states, and stakeholders worked together to implement a region-wide long-term energy efficiency forecast, the first in the nation.¹⁷

In December 2013, the six New England Governors announced a joint effort to address New England’s acute infrastructure challenges.¹⁸ In a unanimous statement, the New England Governors committed to strategic investments in the region’s energy infrastructure that would address the power system reliability challenges identified by ISO-NE and others, diversify the region’s supply portfolio, make the region more competitive economically by reducing energy costs, and protect New England’s environment and quality of life.

¹⁶ 2014 REO at 15.

¹⁷ *Id.* at 39-40.

¹⁸ The statement is available at http://www.nescoe.com/uploads/New_England_Governors_Statement-Energy_12-5-13_final.pdf.

Proposal Development

Since the Governors' statement, the six states have worked, through NESCOE, to develop a conceptual proposal to achieve the Governors' shared objectives. Known as the "Governors' Infrastructure Initiative," the proposal includes an interrelated portfolio of infrastructure enhancements, including investments in both new natural gas infrastructure and electric transmission to deliver additional amounts of no and/or low carbon emitting energy into the system. This portfolio of investments to assure a reliable, diverse and affordable energy supply is in addition to sustained aggressive investment in energy efficiency and renewable power.

While the states are actively working through details, at a high level, the proposal in its current form calls for:

- **Gas Infrastructure**. The states anticipate a one-time solicitation for incremental capacity, priced in increments of 200 MMcf/day to allow for the evaluation of costs associated with adding increments of capacity to achieve levels of at least 1 Bcf above 2013 levels.
- **No and/or Low Carbon Resources**. The states similarly intend to issue a one-time solicitation for incremental transmission to enable the delivery of additional amounts of no and/or low carbon resources into the New England power system. The transmission would be associated with power contracts executed between eligible resources and those states procuring that power pursuant to state statutory authority. Following project evaluations, all states would potentially share in the cost of the transmission, while costs related to the power would be borne by contracting states. As is generally the case with state solicitations, whether and to what extent states decide to move forward with one or more proposals will depend on their judgments as to proposed pricing and other consumer implications.
- **Regionalized Cost Recovery**. Funding mechanisms would be established in the ISO-NE tariff to recover from electric ratepayers, as the beneficiaries of investments, the costs of new pipeline and transmission. Such funding mechanisms, and any associated tariff changes, would be subject to review and approval by the FERC. Costs would be appropriately allocated among the six states consistent with the judgment of each state regarding the benefits of infrastructure investments.

One-Time Structural Adjustment

The reliability and economic competitive challenge has long been the subject of regional debate and no market-based solution has been adopted that resolves it. The states would strongly

prefer that New England not be in a circumstance that requires state action, but do not believe that there are any market adjustments, either under implementation or currently proposed, that could reasonably be expected to solve the region's infrastructure constraints within timeframes the power system and consumers need. The Governors' Infrastructure Initiative provides a singular structural adjustment to a mismatch between gas and electric markets that has placed our region in an unsustainable position in connection with power system reliability and economic competitiveness. The states are committed to working with ISO-NE, market participants, and other stakeholders to ensure that, going forward, appropriate changes are made to the wholesale competitive markets to obviate the need for future state actions.

Next Steps

Over the last several months, NESCOE has engaged with regional stakeholders on the Governors' Infrastructure Initiative, presented the conceptual proposal under development, and welcomed feedback on the concepts presented as well as alternative structures to address New England's challenges.¹⁹ Most recently, in an April 30, 2014 memorandum, NESCOE requested input from interested parties in both the electric and gas industries on the incremental gas pipeline proposal—including alternative configurations—and a proposal put forth by three utilities with service territories in New England.²⁰ The memorandum also sought comment on ways that the proposal might minimize market distortions, as well as proposals for market adjustments going forward.

The states are actively working to move concepts into a more developed proposal for stakeholders' consideration and input and, ultimately, action by FERC. At this time, the states intend to present a further developed proposal for discussion in June.

Conclusion

NESCOE appreciates the opportunity to submit comments on the QER meeting. NESCOE thanks DOE for its focus on New England's acute challenges and its interest in the

¹⁹ See www.nescoe.com for communications related to the Governors' Infrastructure Initiative.

²⁰ This memorandum is available at http://www.nescoe.com/uploads/LettertoNEPOOL_Gas-Electric_30April2014.pdf.

Governor's Infrastructure Initiative as a regional-based solution. NESCOE looks forward to its continuing engagement with DOE on this critical issue.

Sincerely,

/s/ Heather Hunt

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